

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/32309

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 7 H04L12/26

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
 IPC 7 H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>US 5 793 976 A (CHEN THOMAS M ET AL)            11 August 1998 (1998-08-11)</p> <p>abstract            figures 1,2            column 4, line 40 -column 5, line 25            column 7, line 5 -column 7, line 16            column 7, line 50 -column 9, line 14            claim 1</p> <p style="text-align: center;">---            -/--</p>	<p>1,2,4,5,            9,10,            15-18,            20,36,            37,39</p>

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \* & \* document member of the same patent family

Date of the actual completion of the international search

9 September 2002

Date of mailing of the international search report

16/09/2002

Name and mailing address of the ISA  
 European Patent Office, P.B. 5818 Patentlaan 2  
 NL - 2280 HV Rijswijk  
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
 Fax: (+31-70) 340-3016

Authorized officer

Pereira, M

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/32309

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 942 560 A (SIEMENS INF & COMM NETWORKS) 15 September 1999 (1999-09-15)  abstract column 3, line 9 -column 4, line 40 column 5, line 30 -column 6, line 34 column 9, line 9 -column 9, line 45 claims 1,2  ---	1,2,4,5, 9,10, 15-18, 20,36, 37,39
A	US 5 563 875 A (HUYNH LAP T ET AL) 8 October 1996 (1996-10-08) the whole document  ---	1-49
A	EP 0 788 267 A (SUN MICROSYSTEMS INC) 6 August 1997 (1997-08-06) the whole document  ---	1-49
A	EP 0 528 075 A (ALCATEL NV ;BELL TELEPHONE MFG (BE)) 24 February 1993 (1993-02-24) the whole document  ---	1-49
A	US 5 668 800 A (STEVENSON JOHN GEORGE) 16 September 1997 (1997-09-16) the whole document  -----	1-49

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 01/32309

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5793976	A	11-08-1998	CA 2250278 A1 EP 0892958 A1 JP 2000507779 T WO 9737310 A1	09-10-1997 27-01-1999 20-06-2000 09-10-1997
EP 0942560	A	15-09-1999	US 6370163 B1 EP 0942560 A2 JP 11331222 A	09-04-2002 15-09-1999 30-11-1999
US 5563875	A	08-10-1996	NONE	
EP 0788267	A	06-08-1997	US 5822520 A EP 0788267 A2 JP 9326796 A	13-10-1998 06-08-1997 16-12-1997
EP 0528075	A	24-02-1993	EP 0528075 A1 AU 2078892 A CA 2076329 A1 JP 5207017 A US 5343463 A	24-02-1993 25-02-1993 20-02-1993 13-08-1993 30-08-1994
US 5668800	A	16-09-1997	NONE	